

C2

6. (AMENDED) An electronic apparatus capable of replacing a fan module during operation, comprising:

means for instructing a replacement of a fan module; and

means for controlling a fan drive voltage that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.

C3

16. (THREE TIMES AMENDED) An electronic apparatus capable of replacing a fan module during operation, comprising:

a relay cable coupled to a fan module for transmitting a fan drive voltage and capable of being disconnected or connected from or to a fan module;

means for instructing a replacement of a fan module; and

means for controlling a fan drive voltage via the relay cable that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.

**REMARKS**

In reply to the Office Action dated December 13, 2002, Applicants have amended claims 1, 6, and 16 for clarity. No new matter is introduced. As a result of this Amendment, claims 1-18 remain currently pending. Before addressing the present Office Action, Applicants wish to address two outstanding preliminary matters.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

First, Applicants respectfully request that the Examiner return an initialed copy of the PTO Form 1449 filed with an Information Disclosure Statement on March 15, 2001, indicating that the Examiner has considered the document cited therein. Applicants submit another copy of PTO Form 1449 with this response for the Examiner's convenience.

Second, Applicants respectfully request that the Examiner acknowledge Applicants' claim for priority in the next communication. Please refer to Applicants' letter of March 15, 2001, submitted concurrently with the filing of this application. In that letter, on page 2, Applicants claimed the right to priority based on Japanese Application No. 200-200134, filed June 30, 2000. A certified copy of that Japanese Application was also filed at that time.

In the last Office Action, the Examiner rejected claims 1-18 under 35 U.S.C. § 102(b) as anticipated by Heung (U.S. Patent No. 5,287,009). Because the Examiner has not presented a *prima facie* case of anticipation, Applicants respectfully traverse the rejection for the following reasons.

In order to properly anticipate Applicants' claimed invention under 35 U.S.C. § 102(b), each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." See M.P.E.P. § 2121 (8<sup>th</sup> ed., Aug. 2001), *quoting* Richardson v. Suzuki Motor Co., 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8<sup>th</sup> ed. 2001), p. 2100-69.

Claim 1 recites a combination including, among other things, "turning off the fan drive voltage when the replacement is instructed." Heung does not anticipate at least this feature of claim 1.

By contrast, Heung teaches an electronic circuit module fan assembly 10 having a circuit module housing 12, a number of circuit modules 14, and a fan module 16 (see Figs. 1 and 2). Heung further discloses a capability of interchanging the circuit modules and fan modules (see col. 3, lines 33-34). Heung, however, does not teach "turning off the fan drive voltage when the replacement is instructed," as recited in claim 1. Instead, Heung merely teaches positioning a replaceable fan module near the circuit modules to realize a reduction in power consumption.

Applicants note that the Examiner's present rejection references the reasons given for the rejection made in the previous Office Action dated June 4, 2002. In the previous Office Action, the Examiner's rejection alleged Heung includes "the claimed relay cable, means for instructing, and means for controlling are met" (Office Action of June 4, 2002, page 2). Applicants respectfully assert that this rejection does not address each and every element of the present invention, as required to establish anticipation under 35 U.S.C. § 102(b). Nor does this allegation demonstrate that all elements are inherently disclosed by the Heung reference.

Applicants further note Heung discloses an electronic circuit module fan assembly for an electronic system, which provides direct air turbulence onto the circuit modules, thereby dissipating heat more rapidly and reducing the need for heat sinks (col. 2, lines 11-18). As such, the Heung reference is directed to a fan assembly that allows for cooling of the fan assembly. By contrast, claim 1 includes at least "turning off

the fan drive voltage when the replacement is instructed.” Heung does not disclose, either explicitly or inherently, at least this element of claim 1.

For at least the above reasons, Heung fails to teach every element of claim 1, and thus, does not anticipate this claim. Accordingly, the Examiner should withdraw the rejection of claim 1 under 35 U.S.C. § 102(b).

Claim 6 recites a combination that includes, among other things, “means for controlling a fan drive voltage that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.” The Examiner alleges Heung teaches this claim element. To the contrary, however, Hueng teaches placing a replaceable fan module near the circuit modules to reduce power consumption. Because Heung fails to teach at least the above exemplary feature recited in claim 6, the rejection of claim 6 under 35 U.S.C. § 102(b) is improper. The Examiner should thus withdraw the rejection of claim 6.

Claim 16 recites a combination including, among other things, “means for controlling a fan drive voltage via the relay cable that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.” Heung does not disclose at least this feature of the present invention. Instead, Heung teaches a fan module 16 having a fan unit 30 mounted to a fan module baseboard 28 by fan bolts 40. Heung further teaches that the fan module 16 receives electrical power via fan power wires 32. Fan power wires 32 merely supply power to fan unit 30, as shown in Fig. 2. Moreover, as mentioned above, Heung is directed to a system for cooling the fan module. Accordingly, because Heung fails to teach at least the exemplary features

of claim 16, Heung fails to teach every element recited in claim 16. The Examiner should thus withdraw the rejection of claim 16 under 35 U.S.C. § 102(b).

Dependent claims 2-5, 7-15, 17, and 18 depend either directly or indirectly from one of allowable independent claims 1, 6, and 16. Accordingly, Applicants submit that the dependent claims are allowable for at least the same reasons as discussed above for the independent claims. The Examiner should thus withdraw rejection of claims 2-5, 7-15, 17, and 18 under 35 U.S.C. § 102(b).

### CONCLUSION

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: March 12, 2003

By Richard V. Burgujian Reg 24,014  
for Richard V. Burgujian  
Reg. No. 31,744

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



APPENDIX

This Page Blank (uspto)

**APPENDIX TO AMENDMENT OF MARCH 11, 2003**

VERSION WITH MARKINGS TO SHOW CHANGES MADE

**AMENDMENTS TO THE CLAIMS**

1. (AMENDED) A method of replacing a fan module during operation of an electronic apparatus, said method comprising the steps of:

instructing a replacement of a fan module;

controlling a fan drive voltage [not to be] supplied to [a] the fan module; and [to be replaced]

turning off the fan drive voltage when the replacement is instructed.

6. (AMENDED) An electronic apparatus capable of replacing a fan module during operation, comprising:

means for instructing a replacement of a fan module; and

means for controlling a fan drive voltage [not to be supplied] that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

16. (THREE TIMES AMENDED) An electronic apparatus capable of replacing a fan module during operation, comprising:

a relay cable coupled to a fan module for transmitting a fan drive voltage and capable of being [disconnected/connected from/to] disconnected or connected from or to a fan module;

means for instructing a replacement of a fan module; and

means for controlling a fan drive voltage [not to be supplied] via the relay cable that turns off the fan drive voltage supplied to a fan module to be replaced when the replacement is instructed.



ATTACHMENT ONE

This Page Blank (uspto)

*LVBKSP*

PLEASE STAMP TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:  
New U.S. Application for:

Title: Electronic Apparatus and Fan Module Replacing Method  
Inventors: Fumio NISHIMURA and Mitsuyoshi OKAWA

**BOX PATENT APPLICATION**

1. Check for \$750.00.
2. Transmittal Letter
3. Spec. 29 pgs. 3 indep. clms. and 18 clms. total
4. Drawings - 10 sheets of formal drawings containing 12 figures
5. Declaration and Power of Attorney
6. Recordation Form Cover Sheet
7. Assignment to Kabushiki Kaisha Toshiba.
8. Certified copy of Japanese Application No. 2000-200134, filed June 30, 2000
9. Information Disclosure Statement and Information Disclosure Citation, PTO1449 with 1 document attached.

MAR 15 2001

Dated: March 15, 2001

CASE REF: 04329.2538

CUSTOMER NUMBER: 22,852

RVB/FPD/peg

(Due Date: 3/15/01)



*WTF*

*3-16-a*

ATTACHMENT TWO

This Page Blank (uspto)

**FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L. L. P.**

**1300 I STREET, N. W.  
WASHINGTON, DC 20005-3315**

**202 • 408 • 4000  
FACSIMILE 202 • 408 • 4400**

**ATLANTA  
404 • 653 • 6400  
PALO ALTO  
650 • 849 • 6600**

**WRITER'S DIRECT DIAL NUMBER:**

**TOKYO  
011 • 813 • 3431 • 6943  
BRUSSELS  
011 • 322 • 646 • 0353**

**(202) 408-4024**

**March 15, 2001**

**ATTORNEY DOCKET NO.: 04329.2538  
CUSTOMER NUMBER: 22,852**

**Box Patent Application  
Assistant Commissioner for Patents  
Washington, D.C. 20231**

**New U.S. Patent Application  
Title: Electronic Apparatus and Fan Module Replacing Method  
Inventors: Fumio NISHIMURA and Mitsuyoshi OKAWA**

**Sir:**

**We enclose the following papers for filing in the United States Patent and Trademark Office in connection with the above patent application.**

- 1. Application - 29 pages, including 3 independent claims and 18 claims total.**
- 2. Drawings - 10 sheets of formal drawings containing 12 figures.**
- 3. Declaration and Power of Attorney.**
- 4. Recordation Form Cover Sheet and Assignment to Kabushiki Kaisha Toshiba.**
- 5. Certified copy of Japanese Application No. 2000-200134, filed June 30, 2000.**
- 6. Information Disclosure Statement and Information Disclosure Citation, PTO 1449 with 1 document attached.**
- 7. The filing fee is calculated as follows:**

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Assistant Commissioner for Patents

March 15, 2001

Page 2

					\$710	\$ 710.00
Basic Application Filing Fee	Number of Claims		Basic	Extra Claims		
Total Claims	18	-	20		x \$18	
Independent Claims	3	-	3		x \$80	
[ ] Presentation of Multiple Dep. Claim(s)					+\$270	
					Subtotal	\$ 710.00
					Reduction by 1/2 if small entity	-
					TOTAL APPLICATION FILING FEE	\$ 710.00

8. A check for \$750.00 is enclosed. The fee includes:

\$710.00 filing fee; and  
\$40.00 Assignment recordation fee.

Applicants claim the right to priority based on Japanese Application No. 2000-200134, filed June 30, 2000.

Please address all correspondence with respect to this application to:

Finnegan, Henderson, Farabow,  
Garrett & Dunner, L.L.P.  
1300 I Street, N.W.  
Washington, D.C. 20005-3315

Please accord this application a serial number and filing date and record and return the Assignment to the undersigned.

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Assistant Commissioner for Patents

March 15, 2001

Page 3

The Commissioner is hereby authorized to charge any additional filing fees due and any other fees due under 37 C.F.R. § 1.16 or § 1.17 during the pendency of this application to our Deposit Account No. 06-0916.

Respectfully submitted,  
FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

By: 

Richard V. Burgurjian  
Reg. No. 31,744

RVB/FPD/peg  
Enclosures